#4

SEQUENCE LISTING

<110> Plass, Christoph

<120> Detection of Methylated CpG Rich Sequences Diagnostic for Malignant Cells

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<140> 09/775,398
<141> 2001-01-13

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gaatgcattc aagaatattc actaaattat tttagtgata aggaaaaagt ggaaatagct 480

gacagtcatc aatttataaa taaaatgatg gttaaataaa atgatgaaca ttcatataaa 540

ggaatactct atattcagac gagatctgtg tgctcacagg caaacaggtc taagcttact 600

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aaaaatggag aaagaaatng taagcanatg tctgcaagca atcagatatg attagtgact 720

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caacacgtgc ttagcgcgct gctgatctgt gccaggcact gggccagggc cccgacacgc 300

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gataatttca ggtaaatatt aggtcctatt aaaaatatgc gtcttcgcca ggcgcggtgg 420

atcacgcctg taatctcagc actttgagag gtcgagcacg ggcggatctc ctgaggtcaa 480

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<213> Homo sapiens 2.D.74

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ccggagacca gctgaggtag gagtattaac tccctctgct gctctcgcct gccttcctcg 360

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attgccctcc ttgggggaaa agcggaggct taaaatcaat tcgacaaatg agtgtttact 540

gggtgctgag tactgtgctc cgctattgtg agggagggtt atgaataagg tacccccctc 600

ccgccccagg gtccgttgtc agatctcaga atcagtttcc cctgcagttc tggaagccca 660

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<210> 19
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<212> DNA
<213> Homo sapiens 2.E.20

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ctttagtgaa atgaaagtca ttacaaagca aattaccgtc tagggaggga cagccttcag 180

gaaagacaaa tcagatctcc atctgcatct gaagtagggt gtgtttaaat aaaaaatgta 240

aatatcacca ttagatccaa agtactccag agctgtggga tttaatggag tttaaacggt 300

agcacttgaa gccattgctt taccaaaaag aaaaaaaaat cagttaaatt caggtgtttt 360

aatccgtttc ttctttgggg gttttgtgtg atttaaacgc ttgcttttaa gaacctttat 420

gttttcaacc actcatccat agtagaaaag ttctgcaacc ctagactgct ggcttgaagg 480

aaaacctttg caggatttga tatggatttc aacaaagaac cagcctctgc gaggctggag 540

agagctgcgg agctgccatg cctgaagtgc agatggctga accacaagtc tttaggtttc 600

cggagttgtt attgtggtga cctagagtgt cagagccagg agagcaagaa agaggagcca 660

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<213> Homo sapiens 2.E.24

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<222> (493)..(493)
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cgtagttcac cagcaggatg gcggggacga agagcccgag cgccatcagg aacttggtga 180

cggcgtacac ggcgaaggcg cggtcggtgc acactgccaa gtccagcagg cgccggcggg 240

gccggaccct gggggatgcc tcgcgcagct gcagccccgc accgtcagcc tccgcctcgc 300

ccggagcgtc cccggcgcgg tcgccggcgc tgtccctgcg cggtcgcggg cccggcccgg 360

gcggcggcct catgacagcc ccgcaggcgc agcagtgcag caggagcccg ccgagcagca 420

ggaagccgcc gcgccagccg aagcgctcca gcagctgctg gccgagcggc gacagcgcgg 480

acaggaacac ggngctgccc gccgncgnca gcccgttggc cagaggccgc cgncgctcga 540

agtacagccc cagcatgatg agcgacggct ggaagttgag ggccaggccc aggcctgcgg 600

gcgaggcggt gctgtgccgg ggtccccgga gagcccctcc ttgggcccca caggagggag 660

gggccaggcc ccggaa 676

<210> 21
<211> 455
<212> DNA
<213> Homo sapiens 2.E.25

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gctggtccgg gggctagcgc gccgggggct gcggccgatg ggcggggcga ggggccgcgg 180

gggtggcgag ccgggggggc acgggggtcg ggggtgcccg agggggcgcg gccgggcggg 240

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ggcgtgcagg gccaggggcg cccgaggcgt gcgggggtcg ggtgccccag actggtggcg 360

tcagacaggc gtgggtcgtt gggggcctgg gtcgcggctt gactgagggc ccggccgggg 420

ctgtggggcg tcaggagagc gtggggtgtt atggg 455

<210> 22
<211> 156
<212> DNA
<213> Homo sapiens 2.E.30

<400> 22
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cagcctctcg gccgcagccg ccagcctctc tgtggctgct gcttcgggcg gcgcggggac 120

tggtgggggc ggcgctgggg gtggctgtgt ggccgg 156

<210> 23
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<212> DNA
<213> Homo sapiens 2.E.37

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cccaaattcg ttcacttgcg aattgcgtaa gcggccctcc ggtacccaac ctctgggaat 300

tacgcgggct tgtgcctgtg gccaccttgc taggccccac cgctccagcc tgaactccca 360

ccgctccctg ccttgcgctt gatgttccag caacttcgaa ctgtttttat ctcctgtaaa 420

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cacgtagtag ctgttcagta gaggaagtgg tccctttccc taaagggctt tncgtctcac 720

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aacagaccat tataaccttt gctctggagg agtgagcnag caacggactc tgacancatg 960

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<210> 24
<211> 321
<212> DNA
<213> Homo sapiens 2.E.4

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cgaattcgcc cgggaagcgg cgggagggcg ggggtgccgg gaaggaggga ggggagaagg 300

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<213> Homo sapiens 2.E.40

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<223> a or g or c or t

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aaa 1023

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<212> DNA
<213> Homo sapiens 2.E.61

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actcaaccac ctccccaccc ttggacaagc acaaaaccag agaaaacaaa ggccagcaac 180

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atttgagaaa agggcttaac aacagggtat agtgacagag gactcggtaa ctgcttttt 780

gtgcttatta agagagaata ctacagcaac ctatgggaag atttggagtc acgaaaacct 840

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gacactctcc cgccgaggag gctgatttgt aaacttgctg agaagagaat acccagcaga 480

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gatatagagt ctctaggaag taatactagt acatgtttta aaattcaaat actgccaaac 600

agtgagatgt aagtctccct cctaacttct gtttcccaaa tcccatgtcg tttcttctga 660

tgcaatagac attgtatgtg tgtgtgtcta gatagataca tatgtgtatc tctcggcttt 720

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<210> 28
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<212> DNA
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<210> 29
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<213> Homo sapiens 2.F.41

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aaaagagccc tttctcttat gtacaggaaa gattttattc ctaaactgga gccaaaggtt 600

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cccacgggag gaggcggcgg cggcgattgg gccggcggcc cgcacctaga acacggcaag 180

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aacancactt gggcccng 318

<210> 31
<211> 525
<212> DNA
<213> Homo Sapiens 2.F.59

<400> 31
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caccaggacc gccgccgcct ggggaagcgc ttccctgtgg gcagggcgcg gcgggcagtg 180

cggaagcccg aaagctaccg gagcccgggg caggggcggc gcgatgcaga ggcggcgttc 240

gggggccccc agctgcctgc ggctcggcta cccagccgcg atcagagggg gcgggggacg 300

caggaacccc ggcgtccggg cggtgtgcag ccgcagacct attccaagtt tccacgtagt 360

tgcgagagcc caaaaactgt cacgtgcacg tcgctgctga gtgggaggag gtgtttgtca 420

tcgcgttcaa aaggggcgtt tcggtgtctc ccgtcatgca agcaaatggt atggctctcg 480

gccgcctttg aataaacgag tgcttcgaac cctttaccag gaggg 525

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<211> 1032
<212> DNA
<213> Homo sapiens 2.F.70

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<223> a or g or c or t

<220>
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<222> (885)..(885)
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aaggggccct ggggcccagg cgcgcggccc ctgcgtggcg gcaggcggcc caggccagcg 180

ccggcggcta gagaaggcct ccagtccagg cctcatggaa gggcctgcct cgagcggccc 240

ctcaacgccc cgcagtgtgg cactggaagg gacctaaaaa cccacctggc tttctccttt 300

ccccttcccc acgcttccca gggcccaatg cccgcatctc agtttcgctt tccggcaggg 360

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aaacgctcgc gttatcacgg aggagacttt ataaacactt taaacacaac accaaccatt 540

ttatcagcaa aagcgagggg agggggcgt acagtaaatg ctgagagatg ttcgagaagc 600

cccaagacgt tccctgcgga aggagaacgg aagaaagaaa ttacgggcgg aaaaagagta 660

aatattagct ccacacctaa ccacttncnc agccccaaac taggagagaa tctgctaaga 720

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cctgtatttt tattggctaa tcctgcaatt ctaactaaaa aacancttgt gaagaaatca 900

tatagaagga agctaattgc tgatgaatac agtattggga actgttatgg aactggctgg 960

aaagaaatga ttctctacga tactttgagc catgtaggtg agagagatga tgagcactgg 1020

atgtctacta tt 1032

<210> 33

<211> 708
<212> DNA
<213> Homo sapiens 2.G.10

<400> 33
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acctccgtag ccgccccgcc agcaccccca gccgtgcgcc cctgcaccac gcagctgccc 120

tgcgcatgga gcccagaggg acagcaggcc cggcccccag caccaccggc ctgccgggag 180

gttcgggaaa ctggcgtcgc agcggagagg gcatcaggcc aacgcctccc ccgaggctca 240

gctgcgggct cccaggcgta ggcacccacg gcccttacgc tgaccgtagc ttggacgccg 300

ctgccgccgg ggtccaatgc cggtcatgcc catcccgcgg gggttgtgct ccttccatgg 360

tccacacacc acctgcctgc atgcggtctg tgggcccgtg ggcgcctccc acctggcccg 420

caccaagtac aacagcttcg aggtgtgcat caagacgcgc tggctgtagg gcttcatcca 480

cttcctgctc tacttcagct gcagcctgtc actggggcac gctggccgcc ttcttctgcc 540

tgcagtactt gggcgttagc gtcctcctgt gcttccaaca caagctgtgg gtgctgctgc 600

tgctgcttgg cccgctggcg cgttgaaatt tcgctgttga acgagctgct catctacagc 660

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<210> 34
<211> 569
<212> DNA
<213> Homo sapiens 2.G.108

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ccgccgggag gagggcaccg cgcggggtcc gacgcggagg cgtgctcgga acgccggggg 180

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tcggctgcgg gccccggctc gtccgcggtg cccgccgcgg cggcggtgat ctcgggcccc 540

ggcggcggcg gcgggccggc ccggtgtcc 569

<210> 35
<211> 916
<212> DNA
<213> Homo sapiens 3.B.30

<400> 35
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ccgggcgcct cggcagcctt gccagggagg ccgggaggcc cgccgcgggg tagccgcggg 180

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gcccgccgcg ggggcaggag gcggggcccg gggccggccc gcgagcgtgg aggccgcggc 300

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atgtaataac taactaggca aaaagtgtta aaattaataa ctactaaata tccgatgtca 720

ttacaacatt tataatatat aacaatatta aaacatataa ttaataataa aaaaaacctt 780

attttaatct ttttcttttt gttaatttat atcaccttat ataccatttt tctcaatacc 840

attcgataca atcataaatt tatttattgt atattgtcaa aataaaatat tcctctatat 900

aaaaataact ctccta 916

<210> 36
<211> 998
<212> DNA
<213> Homo sapiens 3.B.36

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gccacgtgct gagcgaggcg cgcgagctgg tggcgctgct ggtgcgcggc agcgcggacg 180

gcgccttcct cgacccgagg ccgctgaccg tcgtggccgt ggccaacgtc atgagtgccg 240

tgtgtttcgg ctgccgctac agccacgacg accccgagtt ccgtgagctg ctcagccaca 300

acgaagagtt cgggcgcacg gtgggcgcgg gcagcctggt ggacgtgatg ccctggctgc 360

agtacttccc caacccggtg cgcaccgttt tccgcgaatt cgagcagctc aaccgcaact 420

tcagcaactt catcctggac aagttcttga ggcactgcga aagccttcgg cccggggccg 480

ccccccgcga catgatggac gcctttatcc tctctgcgga aaagaaggcg gccggggact 540

cgcacggtgg tggcgcgcgg ctggatttgg agaacgtacc ggccactatc actgacatct 600

tcggcgccag ccaggacacc ctgtccaccg cgctgcagtg gctgctccct ctctttcacc 660

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agacagaata tgctgagttt gcaagcaggg ccccsggttt ggggtttcgc tccaggtccc 780

caccctcaa aaccaagaat cgcgtcggta arggractca cagtgagggc tgcgacacgc 840

gcacgcgccc cacccagcgg tgccccgaac ccctccggtc yyctatctkg yytctatcgt 900

cccctcmcyt gcttkcgagt gagaacacat ttgcaaagac ccctccaccc cccggaaaaa 960

caagagtttt taaatgcttg gagatgagcc ctgatatc 998

<210> 37
<211> 514
<212> DNA
<213> Homo sapiens 3.B.55

<400> 37
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tgcgggggac tgcgggcgcc ccagcccgac gggtcggcgt agtagccgag cgggcggcca 120

gtgcagcctg cagcctgcag cggcagcgcc ttcacgcccg ccgccgcgta agagagcagc 180

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aggaaagagc cggccatggc gtagcgggcc ccgggcacga tctgcgagcg cggcgagtcg 480

ttgggcgagg gggtcaggcg gtccatgtca cagc 514

<210> 38
<211> 608
<212> DNA
<213> Homo sapiens 3.C.01

<400> 38
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gccccagccg gccgggctcc gtgggggggtc agctccctga cccctacagc gcggtagcgc 120

ctctccgaga gctccgggac cagcggcccg gccgcccccа aagccagcct ccctctccct 180

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tcgtgtaaaa aggcatttta ctccgcgcgt cttccttaca gccatttagt tgggagtttg 600

cggtgggc 608

<210> 39
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<212> DNA
<213> Homo sapiens 3.C.16

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gttggtgaag ctaacgttga ggggcatcgt cgcgggaggc tgctggagcg gggcacacaa 180

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gcgcgccaca gtcccgaacc tctccccttg cagagctatc ccctaaagcg gctgggtggt 300

cttggtgggg gaataaaggg agcacccttt cacccccttt ggacagtccc ctgctatctc 360

ggagacgcac ttagtgaacc agcggcttgg tgcccgccga gcccccgctc ccccgggagc 420

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caaagttttg cgccacctga aggagaaggc gagaggcgcc tgggcgctag cggctgcgtg 600

aaccccgctc cgcgccgggg cccctccgct gcggctgttc ccactcgcgc cctagccgct 660

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caccccagt accgcccccg tccaacactc cttttgccag cttttcttct ttctctcgcc 780

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gcccagagcc ccgctcctcg cagttcctyc gcatctcggg cgcgaggaca cccgagggcg 1020

gccgc 1025

<210> 40
<211> 1010
<212> DNA
<213> Homo sapiens 3.C.17

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<221> n
<222> (829)..(829)
<223> a or g or c or t

<220>
<221> n
<222> (875)..(875)
<223> a or g or c or t

<220>
<221> n
<222> (906)..(906)
<223> a or g or c or t

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ccgggggaaa agtctggact gcctcggcga gaagcggccg gtaggcaacc ggccccagcc 480

tcgcattcgc ctcaaagacc ccaattggct aggagccctt ccctccgcag cggctcgcgc 540

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aggggctgtt ccgcccaatc aggtgtcggg aagcccagcc agtccccggg gagtgtagcc 720

aatagaaggc gacttcggca cacacccgcc ctgatccact aggacaaacc gctcgagccg 780

gggtggtgga ccgatcctga ggcagatcag ccagtccgcc aaactgtgng caagtagatc 840

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<210> 41
<211> 413
<212> DNA
<213> Homo sapiens 3.C.30

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gggagcggct gcttcctccg gggtcgtatc tccgcccggc atggggctgc tggacctttg 180

cgaggaagtg ttcggcaccg ccgaccttta ccgggtgctg ggcgtgcgac gcgaggcctc 240

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gggtgagggc gacaaggagg acgccacccg ccgcttccag gtatgcaggg acccgccccg 360

aagacgaccg gctgcgcggg cctcccccta gacttttggc taccgggccc cgc 413

<210> 42
<211> 927
<212> DNA
<213> Homo sapiens 3.C.35

<220>
<221> n
<222> (595)..(595)
<223> a or g or c or t

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caagctattt gcctgctttc cctccgcaga agaaaaaagg ctcaattgga aggtggagga 840

tgaagccacc ctctatggtc accccaatct gagagcttta ctttatataa ctacattcta 900

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<210> 43
<211> 1365
<212> DNA
<213> Homo sapiens 3.C.64

<400> 43
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cctgagcccc caggctgggg accggcaggg gctccgggga ggctggtgag gccaggacgg 180

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aacaaacgga agcagcggag cctccgcctc cmasscykgc cyctgyscgs yswgmcmggc 1260

gcattsragt gcwcsakkym sgcycaatym mgagagckct gracktckca aytatcwcgg 1320

actarsrrsr rcawwtkmww argsactcay tgagtaactg atatc 1365

<210> 44
<211> 608
<212> DNA
<213> Homo sapiens 3.D.21

<400> 44
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<211> 1947
<212> DNA
<213> Homo sapiens 3.D.24

<220>
<221> n
<222> (748)..(748)
<223> a or g or c or t

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cagcatattt atttcatact gtaatatagg aaatagctat tttttagact ttttatatta 180

ttagcactga tcatacaaac atggaataga aattccttat gttttatctg gatttaaggt 240

gatacataat ggaatatatt tctatcaagc cgtacacatt agagataatg aaatcacttg 300

tgttctagtt taaacattat gggaatttca gaactgcaac ataacaaata atcctcggat 360

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caagtaatta aatcctgacc tcctctaccc cagtctgtcc tggggaatgg ccaacactgg 540

cctttcacaa ctgtgtgtta ctagaaatgc aacagaaacc cagctgaatc ccctcctctg 600

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actgggaaga taaagttatt tttacattta taaagaaaca catatttatt cacmctcatt 720

wcaagraagg tcaagaatct atmcaaanac caagaggaat ttttaaaatc ccataatwcc 780

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ttccaaacaa tgtatttaca aataaatgca cacacacact atctgtctta tatacaacgt 1020

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cctcaaattt ataaccgccc tgaacgcaga acatcaaccg cgacagctgt ggcatcagcg 240

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acactatata tcccaccagt tcatcttggt acaggccaaa aggtaattca aaaagcgaaa 660

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cattatgaaa acacccactg cactcctttt atttattagg accttaagtt atcctatctc 480

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tcttaaagat ttttaaagtc tccttctaaa tttccagcct tccatttagt ttcaagccat 660

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aaaaataagg ccataaggta ttttatgatc attttgaaat aaaaaattga aatagtttaa 780

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<212> DNA
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ataatttaaa nncctccctg ntcgcccccg ccccccgctt ttttttttttt tttttctnaa 780

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<213> Homo sapiens 3.E.50

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<212> DNA
<213> Homo sapiens 3.E.57

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<223> a or g or c or t

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<210> 72
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<212> DNA
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<210> 73
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<212> DNA
<213> Homo sapiens 4.E53

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<211> 446
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<213> Homo sapiens 4.F.17

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<212> DNA
<213> Homo sapiens 4.F.6

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